

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

(a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,

(b) the output polarizer angle  $\gamma$  is at an angle of  $135^\circ$  minus the twist angle of the said liquid crystal cell, and

(c) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 1.1 and 1.5 microns.

2. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

(a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,

(b) the output polarizer angle  $\gamma$  is at an angle of  $135^\circ$  minus the twist angle of the said liquid crystal cell, and

(c) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.6 and 1.0 microns.

3. (Original) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

(a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,

(b) the output polarizer angle  $\gamma$  is at an angle of  $45^\circ$  minus the twist angle of the said liquid crystal cell, and

(c) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.9 and 1.3 microns.

4. (Withdrawn) A liquid crystal display comprising an input polarizer, a rear reflector, and a liquid crystal cell in between said input polarizer and said reflector characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

(a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,

(b) the twist angle of the said liquid crystal cell has a value in between  $-60^\circ$  and  $60^\circ$ , and

(c) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.45 and 0.65 microns.

5. (Original) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $65^\circ$  and  $85^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $20^\circ$  and  $40^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 1.1 and 1.5 microns.

6. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $80^\circ$  and  $100^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 1.1 and 1.5 microns.

7. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $80^\circ$  and  $100^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $-35^\circ$  and  $-55^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.9 and 1.3 microns.

8. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $120^\circ$  and  $140^\circ$ ,
- (c) the output polarizer angle  $\alpha$  is between  $80^\circ$  and  $100^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 1.1 and 1.5 microns.

9. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between 35 ° and 55 ° relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between 65 ° and 85 °,
- (c) the output polarizer angle  $\gamma$  is between 20 ° and 40 ° relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.7 and 0.9 microns.

10. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between 35 ° and 55 ° relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between 80 ° and 100 °,
- (c) the output polarizer angle  $\gamma$  is between 35 ° and 55 ° relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.7 and 0.9 microns.

11. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $80^\circ$  and  $100^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $-35^\circ$  and  $-55^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 1.0 and 1.2 microns.

12. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $80^\circ$  and  $100^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.75 and 0.95 microns.

13. (Withdrawn) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell in between said input and output polarizers characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $-5^\circ$  and  $15^\circ$ ,
- (c) the output polarizer angle  $\gamma$  is between  $-35^\circ$  and  $-55^\circ$  relative to the input director of the said liquid crystal cell, and
- (d) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.9 and 1.0 microns.

14. (Withdrawn) A liquid crystal display comprising an input polarizer, a rear reflector, and a liquid crystal cell in between said input and reflector characterized by a twist angle, a cell thickness and a birefringence of the liquid crystal, such that

- (a) the input polarizer angle  $\alpha$  is between  $35^\circ$  and  $55^\circ$  relative to the input director of the said liquid crystal cell,
- (b) the twist angle of the said liquid crystal cell is between  $-5^\circ$  and  $15^\circ$ ,  
and
- (c) the product of the cell gap  $d$  and birefringence  $\Delta n$  has a value of between 0.4 and 0.8 microns.

15. (Currently Amended) A liquid crystal display as claimed in claim [[1]] 5 wherein the input polarizer angle is  $\alpha \pm N\pi$  where  $N$  can be any positive or negative integer.

16. (Currently Amended) A liquid crystal display as claimed in claim [[1]] 5 wherein the output polarizer angle is  $\gamma \pm N\pi$  where  $N$  can be any positive or negative integer.

17. (New) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell between said input and output polarizers characterized by a twist angle, an applied voltage and a cell gap, such that

(a) said liquid crystal display produces an output having a color that varies in accordance with an applied voltage;

(b) said twist angle is less than  $100^\circ$ ; and

(c) said cell gap is less than 8 microns.

18. (New) A liquid crystal display comprising an input polarizer, an output polarizer, and a liquid crystal cell between said input and output polarizers characterized by a twist angle, an applied voltage, a birefringence and a cell gap, such that

(a) said liquid crystal display produces an output having a color that varies in accordance with an applied voltage;

(b) said twist angle is less than  $100^\circ$ ; and



(c) the product of said birefringence and said cell gap is no greater than  
1.3  $\mu\text{m}$ .